SPORT & RECREATIONAL OPTICS

HOW TO USE YOUR RIFLESCOPE

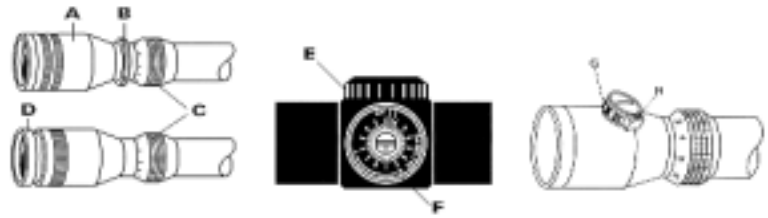
Hold the scope approximately three to four inches from your eye, and look through the eyepiece at a flat, featureless, well-lit area such as a wall or open sky.

CAUTION: DIRECT VIEWING OF THE SUN CAN CAUSE PERMANENT EYE DAMAGE. DO NOT ATTEMPT TO VIEW THE SUN WITH EITHER THIS PRODUCT OR THE NAKED EYE.

Standard Eye Bell:

If the reticle does not appear sharp and well defined, loosen the eye bell lock-ring. Rotate the eyepiece in either direction two turns. Look through the scope again. If the focus of the reticle has improved, but is still not perfect, continue to rotate the eye bell in the same direction. If the focus condition has worsened, rotate the eye bell in the opposite direction. When the reticle appears in sharp focus, re-tighten the lock-ring.

FIG. 1



Fast-Focus:

On models equipped with a fast focus eye bell, rotate only the end portion of the eye bell in or out as described earlier. There is no lock ring utilized in this system.

CAUTION: BE SURE THAT THE FIREARM IS NOT LOADED. PRACTICE SAFE FIREARM HANDLING PROCEDURES AT ALL TIMES.

FIG. 2

With the rings pre-installed onto the firearm, separate the top and bottom halves of the rings.

Set the scope in the cradles formed by the bottom ring halves. Replace the tops loosely; do not tighten.

Position the scope as far forward as possible. Rotate the scope to position the elevation turret on top.

With the firearm in a steady rest position, slowly pull the scope to the rear until the full field of view becomes visible. Check the orientation of the reticle; the vertical and horizontal posts of the reticle should be aligned with the vertical and horizontal (bore) axes of the firearm.

With the scope properly positioned and the reticle aligned with the axes, tighten the top halves of the rings.

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CAUTION: Avoid over-tightening the rings. This can damage the scope, affecting performance or rendering it inoperable. There should be a slight even gap on the left and right sides of both sets of rings, between the top and bottom halves.

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FIG. 3

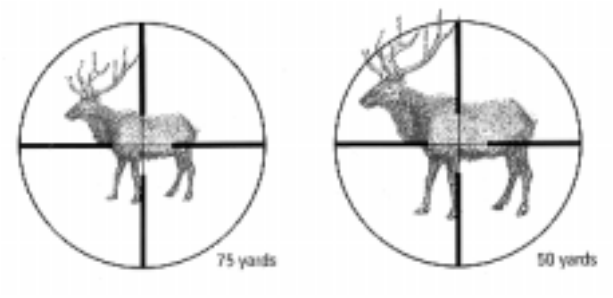
Pre-zero sighting can be done either manually or with a bore sighting collimator.

To bore sight manually, open the action of the firearm. If your riflescope has an adjustable objective, rotate the parallax ring to the 50 yard position. Set variable-power scopes to mid power.

With the firearm in a steady rest position, remove the caps from the windage and elevation screws.

Adjust the windage and elevation screws to position the reticle on the center of the target. For windage adjustment, turn the windage adjustment screw clockwise to move the point of impact right and counterclockwise to move the point of impact left. In the same manner, adjust the elevation by turning the elevation adjustment screw clockwise to lower the point of impact and counterclockwise to raise the point of impact.

FIG. 4



If a large amount of adjustment is required to align the reticle, make approximately one-half of the required windage correction, then approximately one-half of the required elevation correction. Finish by applying the balance of windage and elevation correction.

NOTE: When using windage-adjustable rings, make major windage correction with them.

Final adjustment should be made with the scope's internal adjustment system.

FINGER-ADJUSTABLE SCOPES:

Remove the protective caps and rotate the finger-adjustable windage and elevation turrets to center the reticle in the same manner described above.

CAUTION: ALL DISCHARGING OF FIREARMS SHOULD BE DONE AT AN APPROVED RANGE OR EQUALLY SAFE AREA. USE OF EYE AND EAR PROTECTION IS RECOMMENDED.

Danger: If a bore sighting collimator or any other bore obstructing device was used, it must be removed before proceeding. An obstruction can cause serious damage to the gun and possible personal injury to yourself and others nearby.

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Set parallax correctable models to the 100 yard position. Set variable-power scopes to highest power.

From a steady rest position, fire three rounds at a target 100 yards away. Observe point of impact on the target and adjust windage and elevation screws as needed to correct aim. Repeat as necessary.

Note: Each click of adjustment changes bullet strike at a shooting distance of 100 yards by the amount indicated on the windage and elevation screw dial plates. To calculate the click value at distances other than 100 yards, use the following formula: divide the distance (number of yards) by 100. The resulting number, when multiplied by the click value stated on the windage and elevation dial plates, will yield the actual click value of the scope at the shooting distance.

distance / 100 = N

N * stated click value = actual click value

Once zeroing of the weapons is completed, replace the windage and elevation caps.

FINGER-ADJUSTABLE SCOPES:

After zeroing, you may use the hex wrench supplied with your scope to remove the windage and elevation drums and then re-position them so that the zero ("0") lines up with the indicator line on the spindle. Any further windage or elevation adjustments can be made more precisely by calculating the amount of clicks from the zero point the windage and elevation drums have been moved.

The rheostat, located at the top of the eyebell, controls the degrees of illumination. To prevent accidental discharge in shipping, a plastic insulator has been placed within the battery compartment. To remove the plastic insulator, unscrew the battery cover and remove the plastic from both sides of the battery. Replace the battery, being careful to insert the battery positive ("+") side up. Replace the battery cover firmly to assure that it is water tight. The illumination feature is activated by depressing and releasing the small button located beside the battery compartment. The button should be depressed until a click is felt. The first "click" will be the illuminator's least bright setting.

Subsequent "clicks" will increase the illuminator's brightness to a maximum of seven clicks.

The eighth click will switch off the illuminator. The illuminator may also be switched off from any setting by depressing and holding the button down for approximately two seconds.

Scopes with illuminated reticles are powered by one 3V lithium battery, type 2032. If the reticle dims or does not light at all, replace the battery.

To be parallax free, the target must be located at the distance for which the scope is focused.

Targets at any other distance will cause parallax, which manifests itself as apparent movement of the reticle against the stationary target.

Riflescopes equipped with a focusable objective lens allow for parallax correction at various user-select ranges. To adjust the range setting of the scope, rotate the objective focus ring to the desired distance setting.

NOTE: The location of the parallax adjustment may vary between models. The adjustment may be located on the objective, in front of the eyebell or in the saddle area of the scope.

Do not attempt to disassemble or clean the scope internally. If the scope requires repairs or adjustment, complete instructions may be found in the warranty.

The external optical surfaces should occasionally be wiped clean with the lens cloth provided, a soft lintless cloth, or an optical quality lens paper. Keep the protective lens covers in place when the scope is not in use.

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Remove any external dirt or sand with a soft brush so as to avoid scratching the finish. Wipe the scope with a damp cloth, following with a dry cloth. Then go over the metal portions of the scope with a silicone treated cloth in order to protect the scope against corrosion. Do not to touch any lens surface with the silicone cloth.

Store the unit in a moisture-free environment.

RANGEFINDING RETICLE:

The end-to-end distance of the thinner portion of the reticle posts (both vertical and horizontal) subtends 30 M.O.A., which is equal to 30 inches at 100 yards. The body of an average-sized adult Whitetail buck would fit into this portion of the reticle. If only one-half of the buck fits into this portion of the reticle, it is 50 yards away. If the entire buck fills only one-half of this portion of the reticle, it is 200 yards away. If the entire buck fills only one-third of this portion of the reticle, it is 300 yards away.

MASTER SHOT RETICLE:

Shot Shell Use: Although many factors will affect shot density, the inner circle of this reticle represents the most dense portion of your shot pattern.

An average turkey load will produce a pattern of approximately 36" in diameter at 40 yards. The inner circle of the reticle isolates the inner fifth of that pattern, making a shot that is centered to the head result in minimal damage to the meat.

Slug and Black Powder Use: The diameter of the inner circle subtends 15 M.O.A., which is equal to 15" at 100 yards.

The body of an average-sized adult buck from the top of his back to the bottom of his chest would fit into this portion of the reticle at a distance of 75 yards. If only two-thirds of the buck fits into this portion of the reticle, it is 50 yards away.

NOTE: The size of the deer will appear to decrease in proportion to increased distance and increase in proportion to increased magnification. All calculations given are a 4x.

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